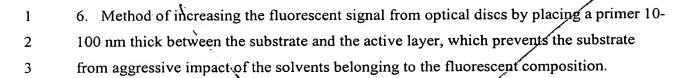


WHAT IS CLAIMED IS:

- 1. Fluorescent composition for manufacturing single- and multilayer optical discs of CD ROM, DVD and WORM types with fluorescent reading, comprising:
 - -\ fluorescent dye,
 - film-forming polymer,
 - plactisizer, and, if necessary,
 - surfactant, and
 - light stabilizer.
- 2. Fluorescent composition of claim 1, distinguished by choosing the fluorescent dye among xanthene dyes of the eosine and rhodamine groups, acridine, oxazine, azine, perylene, violanthrole, cyanine, phthalocyanine dyes, indigoid colors and porphyrines.

 Content of the fluorescent dye in the layer is 0.1-10%.
 - 3. Fluorescent composition of claim 1, distinguished by choosing the film-making polymer among the resins, including cellulose esters, such as nitrocellulose, cellulose acetate, cellulose acetate butyrate; cellulose ethers such as methyl cellulose, ethyl cellulose, butyl cellulose; vinyl resins such as polyvinyl acetate, polyvinyl butyral, polyvinyl acetal, polyvinyl alcohol and polyvinyl pyrrolidon, acrylic resins such as polymethylmethacrylate, polybutyl acrylate, polymethacrylic acid, polyacrylic amid and polyacrylonitrile and their mixture.
 - c4. Fluorescent composition of claim 1, distinguished by choosing the plasticizer among phthalates (dibutyl phthalate, dioctyl phthalate at al) and phosphates (triphenylphosphate, tricresylphosphate at al). Content of the plasticizer in the layer is 10-50%.
 - 5. Method of producing the optical disc by solvating the compounds of claim 1 in an organic solvent chosen among alcohols, ketones, amides, sulfoxides, ethers, esters, halogenated aliphatic hydrocarbons or aromatic solvents, then dispersing the received composition by spin coating, roller coating or dip coating on a substrate, which is a polycarbonate or polyethylene therephthalate disc, or on a primer.

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- 7. Method of increasing the fluorescent signal level, distinguished by use of liquid silica glass, Colcoat N-103X product by Colcoat Co., Ltd., polyvinyl alcohol, heat treated after depositing on the substrate, thermosetting resins, including epoxy, phenol-, urea- and melamine-formaldehyde resins, polyorganosiloxanes, as well as latexes divinyl styrene, divinylonitrile, styrene acrylate, alkyd, acrylate, etc. for producing the primer.
- 8. Method of increasing the fluorescent signal level, distinguished by use of different surface-active substances, such as butyl glycol, propylene glycol, dimethyl glycol, diethyl glycol, etc., as well as by heating the material at 100-120°C for improving adhesion of the active layers to the substrate or the primer.
- 9. Method of increasing the fluorescent signal level, distinguished by making a substrate from the polymer, providing effective absorption of non-fluorescent associates on its boundary with the active layer, as well as good adhesion of the active layer to the substrate.
- 10. Method of increasing the fluorescent signal level according to item 9 distinguished by use of polyvinylchloride and its co-polymers as the substrate.

